

What is Claimed:

1. An analysis module for incorporation in an integrated circuit, the integrated circuit having circuit function modules, the analysis module including at least one submodule test structure arranged such that analysis of the at least one submodule test structure provides at least one physical parameter of the integrated circuit for use in subsequent testing of the circuit function modules.

2. An integrated circuit comprising:
circuit function modules arranged to provide operating functions of the integrated circuit; and,
an analysis module including at least one submodule test structure arranged such that analysis of the at least one submodule test structure provides at least one physical parameter of the integrated circuit for use in subsequent testing of the circuit function modules.

3. A system for testing integrated circuit functionality, the system comprising:
at least one analysis tool;
an integrated circuit having circuit function modules arranged to provide operating functions of the integrated circuit, and an analysis module including at least one submodule test structure,
wherein the at least one submodule test structure is arranged such that analysis of the at least one submodule test structure by the at least one analysis tool provides at least one physical parameter of the integrated circuit

for use in subsequent testing of the circuit function modules by the at least one analysis tool.

4. The analysis module, according to claim 1 wherein
5 the at least one submodule test structure is chosen in dependence upon the at least one analysis tool to be used in subsequent testing.

5. A method for testing integrated circuit
10 functionality, the method comprising:
selecting at least one analysis tool to be used for testing an integrated circuit;
selecting at least one submodule test structure in dependence upon the chosen at least one analysis tool;
15 designing circuit function modules of the integrated circuit arranged to provide operating functions of the integrated circuit;
designing an analysis module of the integrated circuit including the at least one submodule test structure,
20 fabricating the integrated circuit;
analysing the at least one submodule test structure by the at least one analysis tool in order to provide at least one physical parameter of the integrated circuit;
and,
25 testing of the circuit function modules by the at least one analysis tool using the at least one physical parameter.

6. The analysis module, according to claim 1 wherein
30 the at least one submodule test structure includes a calibration structure.

7. The analysis module, according to claim 1 wherein the at least one submodule test structure includes a probing structure.
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8. The analysis module, according to claim 1 wherein the at least one submodule test structure includes optical alignment means.
- 10 9. The analysis module, according to claim 1 wherein the at least one submodule test structure is isolated from the function modules.
10. The analysis module, according to claim 1 wherein
- 15 the testing includes failure analysis, system calibration and evaluation.